

| Date:    | February 2016  |
|----------|--|
| Subject: | Introduction of Enhanced Knuckles on Meritor Non-Drive Front Steer Axles |
| Models:  | FG-941, FG-943, TFG-941, TFG-943, TFG-94X, MFS-66-122, MFS-66-124,       |
|          | TMES-66-122 TMES-66-124 and TMES-66-12X                                  |

Dear Customer,

In an effort to continually improve and expand its product line offerings, Meritor Australia is pleased to announce the release of a new enhanced knuckle for the locally assembled non-drive front steer axles listed above.

The new enhanced knuckle (shown below) is approved for maximum 6,622 KG (14,600 pounds) Gross Axle Weight Rating (GAWR) applications and can package both Meritor EX225 air disc brake and QPlus drum brake systems. In all cases, the new enhanced knuckle meets or exceeds Meritor's performance, acceptance and validation criteria.



## Features of the Enhanced Knuckle:

- Compatible with existing Meritor EX225 air disc brake and QPlus drum brake systems
- Allows for packaging Meritor EX225 air disc brakes at or near the 12 o'clock position, which permits a wheel cut of up to 55 degrees
- Compatible with existing Meritor beam, steering arm and tie rod assemblies

\*Note: Certain vehicle characteristics can impact an axle's performance and durability. Proper application analysis must be performed prior to axle installation to ensure acceptable operating parameters.



The enhanced knuckle is not directly interchangeable with existing FG-94\* knuckles. The enhanced knuckles require new design king-pins and screw-in king-pin caps in place of the current bolt-on caps.

| Component           | FG-94* Knuckles | Enhanced Knuckles |
|---------------------|-----------------|-------------------|
| Knuckle Left Hand   | A1-3111-Y-3301  | A1-3111-L-4666    |
| Knuckle Right Hand  | A1-3111-B-3304  | A1-3111-R-4724    |
| King-Pin            | 3101-D-1070     | 3101-T-1086       |
| King-Pin Cap Top    | 2297-T-4752     | 3280-B-9830       |
| King-Pin Cap Bottom | 2297-T-4752     | 3280-C-9831       |

Service components for in-service FG-94\* axles including replacement knuckles will continue to be available through standard Meritor aftermarket channels.

For axles with enhanced knuckles, the king pin kit part number for service is R201608, which includes the new king-pins, king-pin caps and associated hardware items. For service procedures, please refer to maintenance manual MM-2, which is available from the Literature on Demand section at www.meritor.com.

With the introduction of the enhanced knuckles, Meritor Australia will create new axle specification numbers with MFS66 nomenclature in place of the current FG-94\* nomenclature.

| Current Axle Nomenclature | Equivalent New Axle with Enhanced<br>Knuckles |
|---------------------------|---|
| FG-941                    | MFS-66-122                                    |
| FG-943                    | MFS-66-124                                    |
| T-FG-941                  | T-MFS-66-122                                  |
| T-FG-943                  | T-MFS-66-124                                  |
| T-FG-94X                  | T-MFS-66-12X                                  |

Axles supplied from 15th February 2016 onwards will feature the enhanced knuckles and will be identified using the MFS66 nomenclature. Please refer to page 3 and 4 for MFS66 axle nomenclature charts.

For any questions relating to the above, please contact a Meritor® Australia representative on +613-9300-5200. Additional product and service information for Meritor axles is available from the Literature on Demand section at www.meritor.com.

## Issued by Product Engineering Meritor HVSA Ltd



|   | MFS   | MERIT<br>S - FRONT STEE                 | MERITOR / HVS AUSTRALIA<br>FS - FRONT STEER AXLE IDENTIFICATION CHART | .RT   |  |                             |
|---|---|---|---|---|--|-----------------------------|
| Base Model  | L   |   | Coptional fields per Customer requirements                            | mer requirements  |  |                             |
| MFS ?? 1  | 52 V V 5  | ххх                                     | ζ ζ   | 6   |  |                             |
|   |   |   |   |   |  |                             |
| Meritor Front                                       | <u>A - Conventional Knuckle</u><br><u>A - A</u> ustralia                                    |   | <u>Options ava</u><br><u>Hub / Steering Arr</u>                       | <u>Options available include:</u><br>Hub / <u>Steering Arms</u> / <u>Tie Rod &amp; Arms</u> |  |                             |
| Steer Axle  | with Brake Type:<br>N - No Brakes   | Axle<br>Composition                     | Refer to Bill of Mate<br>desig  | Refer to Bill of Material (BOM) for correct<br>designation                                  |  |                             |
|   | P - 'S' Cam Brake<br>L - 'Q' Plus Cam Brake<br>C - Disc Brake<br>Z - Non Meritor Disc Brake | (sequential<br>number<br>from database) |   |   |  |                             |
|   |   |   | Hub Type (see NOTE)   | NOTE)   | Steeri   | Steering Arms               |
| Axle Type   | De  |   | N- No Hubs  |   | MFS73  | MFS66                       |
| 73 = 16,060 pounds - N                              | 73 = 16,060 pounds - Nominal Axle Load Rating (GAWR)  |   | E- 285mm 10 Stud Hub w/X30 Drum for Alum Wheels                       | m for Alum Wheels   | H - 3133N6956  | E - 3133E7545F              |
| 66 = 14,600 pounds - N                              | 66 = 14,600 pounds - Nominal Axle Load Rating (GAWR)  |   | F- 285mm 10 Stud Hub w/X30 Drum for Steel Wheels                      | m for Steel Wheels  | <b>J -</b> 3133F6922                                   | F - 3133A7333F              |
| 1 = Straight Kingpins - Easy Steer Bushing          | Easy Steer Bushing  |   | G- Spoke Hub  |   | L - 3133E7623  | G - 3133A8269F              |
| 22 = 69.0" King Pin Intersection & 3.5" Drop        | rsection & 3.5" Drop  |   | H- Same Hub option on BOM   |   | M - 3133X7356  | K - 3133S6545F              |
| 24 = 69.0" King Pin Intersection & 5.0" Drop        | rsection & 5.0" Drop  |   | J- 285mm 10 Stud Alum Hub w/Cast Drum for Alum Wheels                 | st Drum for Alum Wheels   | N - 3133T7326  | L - 3133Q6543F              |
| <u>MFS 73</u> equivalent in the US is <u>MFS 16</u> | he US is <u>MFS 16</u>  |   | K- 285mm 10 Stud Alum Hub w/X30 Drum for Alum Wheels                  | 0 Drum for Alum Wheels  | <b>P -</b> 3133J7446 & 3133T7326                       | N - 3133Y6461F & 3133S6545F |
| MFS 66 (New Nomenck                                 | MFS 66 (New Nomenclature) equivalent to FG94* & MFS 14                                      | <u>4</u> in US                          | L- 285mm 10 Stud Alum Hub w/X30 Drum for Steel Wheels                 | 0 Drum for Steel Wheels   | Q - 3133J7446 & 3133E7623                              | <b>R</b> - 3133Y6811F       |
|   |   |   | P- 335 mm 10 Stud Hub/Drum for Alum Wheels                            | Alum Wheels   | <b>R -</b> 3133X7356                                   | <b>S -</b> 3133A7359F       |
|   |   |   | Q-335mm 10 Stud Hub/Drum for Steel Wheels                             | steel Wheels  |  | <b>T -</b> 3133T9302F       |
|   |   |   | Y- 285mm 10 Stud Hub/Drum for Steel Wheels                            | steel Wheels  |  |                             |
|   |   |   | Z- 285mm 10 Stud Hub/Drum for Alum Wheels                             | uum Wheels  |  |                             |
| NOTE: for Disc Brake and Hub combination            | combination   |   |   | Tie Rod Arms  |  |                             |
| CY= EX225 disc brake with 24                        | CY= EX225 disc brake with 285mm 10 Stud Hub for Steel Wheels                                |   | MFS73   |   | MFS66  |                             |
| CZ= EX225 disc brake with 24                        | CZ= EX225 disc brake with 285mm 10 Stud Hub for Alum Wheels                                 |   | U - 3133J8148 & 3133K8149   |   | T - 3133D7336 & 3133E7337                              |                             |
| CH= DX195 disc brake with 2                         | CH= DX195 disc brake with 285mm 10 Stud Hub for Alum Wheels                                 |   | V - 3133L8150 & 3133M8151   |   | U - 3133H7340 & 3133J7342                              |                             |
|   |   |   | W - 3133N8152 & 3133P8154   |   | V - 3133R7350 & 3133S7351<br>W - 2122M724E & 2122N724E |                             |
|   |   |   | X - 31330/933 & 3133D/934   |   | W - 3133M/345 & 3133N/346                              |                             |



